PHMSA IA-Mobile Training Workshop

Dec 2022

IA-Mobile Workshop

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IA-Mobile Workshop

Objectives

The student will:

- 1. Launch, login, and get to homepage of IA-Mobile
- 2. Understand basic iPad operations useful for using IA-Mobile
- 3. Understand the IA-Mobile application's primary purpose(s)
- 4. Access an existing inspection with IA-Mobile
- 5. Navigate the inspection's existing content (questions, results, observations)
- 6. Understand how to use the different observation types in IA
- 7. Collect observations
- 8. Collect results
- 9. Link observations to results
- 10. Understand the connection between IA-Mobile and IA-Desktop and how to use both together effectively.

You will work in groups of 2-3, both as a means to helping each other and also to better simulate the team-based inspection IA supports. Learning how to assign tasks, resolve data conflicts, and manage data from different team members etc will be easier done in groups.

Assumptions

- 1. You have IA-EDU installs on your laptop and iPad. These installs have Orange branding. We will use these instead of the production-pointed (blue) installs of IA you may typically use to avoid making changes to live data during training.
- 2. You have a functional IA account
- 3. Your password is not expired and you remember it
- 4. You can connect your device to the internet in the classroom.

If the items above are not yet true for you, please stop and get those things set up prior to moving on.

Your instructors will help you install special Training (EDU) versions of the IA software. This needs to be done prior to starting the training work.

Before you start

The following pages include "steps" that will lead you through the scenario. Some steps are to be done alone, these are indicated by and others involve a group effort. These are indicated by time to time, you'll see a pause marker in places where you'll need pause to let your team catch up, or where we intend to have a short presentation on important points to the entire class.

At most of these locations, there will be some optional exercises you can do while you wait.

For future reference, note that you can reach out to IA-support@dot.gov if you have any questions about using IA-Mobile.

Step 1: Launching and Logging in to IA Mobile

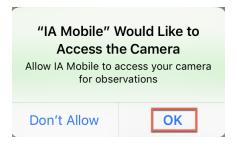
Important: We will be using the EDU version of IA mobile for this workshop. It has an orange icon. If you do not have that installed, please let your instructor know before proceeding.



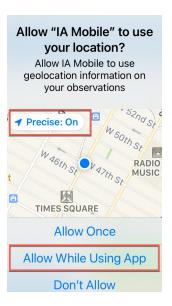
- 1. Connect your device to the internet.
- 2. Launch IA-Mobile and provide your credentials to log in

If this is your first time using IA-Mobile on your iPad, you should see three iOS permission prompts when you open IA-Mobile. In order for IA-Mobile to collect the most accurate inspection information, it is important to grant it the following permissions (permission options may vary depending on what version of iOS your iPad is using)

- Camera access: "OK"
- Photos access: "Allow Access to All Photos"
- Location: "Allow While Using App", important: ensure that the "Precise" option is set to "On"



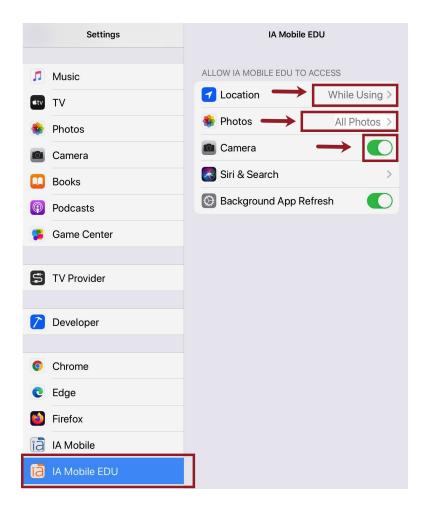


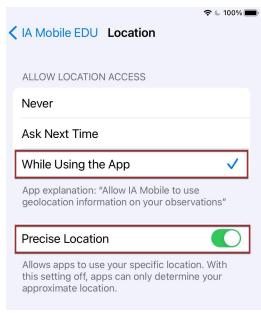


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If you would like to review/update IA-Mobile's permission settings, you can do so at any time. Open the iPad's settings, scroll down to the bottom of the left side column, and tap IA-Mobile (IA-Mobile EDU in case of this training workshop). This will open the application's settings to the right. Ensure that it has permission to access the camera, all photos, and location while in use. Also be sure to tap on the "location" item to turn "Precise Location" on.

You can also get to IA-Mobile's permission settings by tapping the blue "App Settings" button on the IA-Mobile login screen. Note that exact settings/permission options may vary depending on what version of iOS your iPad is using.





Step 2: Using the Inspection List and loading an inspection

After first logging in, IA-Mobile will provide a list of inspections you are involved in.

- 1. Locate your inspection from the IA-Desktop workshop. It should have your name in the title. Hint: you can use the search inspection text box to narrow the list.
- 2. After tapping the inspection in the list, the inspection will load. You will see an information checklist as IA loads the various components of the inspection.

Loading inspection, please wait
Please wait while your inspection is loaded. You will be redirected automatically when the process is complete.
Information Checklist
O Planning
O Inspection Sync
O Access controls
O Tasks
O SMART Data

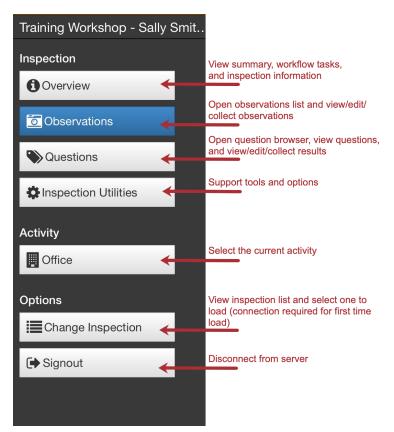
Step 3: The IA-Mobile Menu

IA-Mobile has two primary modes of operation (observations and questions) as well as a number of setup and configuration utilities. You can access all of them via the menu button in the upper left.

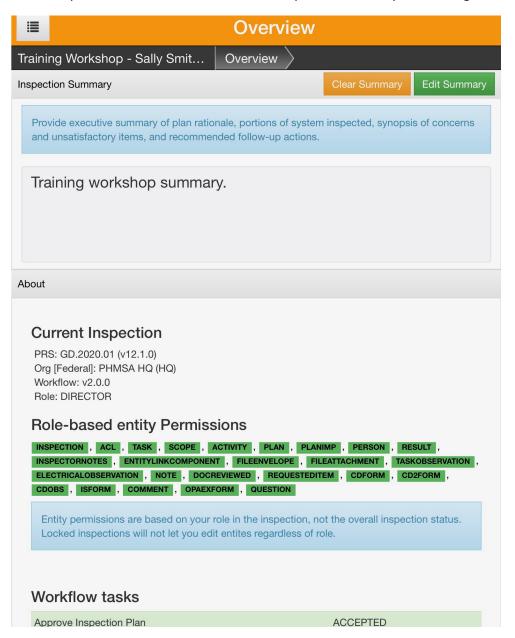
1. Click the menu button to reveal the slide-in menu. The options are described below.



The side-drawer menu provides access to all the major functions of IA-Mobile



2. Tap the Overview button to view the inspection summary and other general information.



3. Now we'll dive into observations. Tap the **Observations** button.

Step 4: Using Observation List Filters

The observations list displays all the attachments and observations in the inspection for the current activity and allows you to quickly collect any of the 10 primary observation types or 12 new-construction field observations. This interface is primarily targeted toward context-less, on-the-fly data collection. That is, it is not typically driven by a specific set of ordered questions. In the field, the opportunities to observe things do not typically occur in the same order the questions are arranged in. The observations mode allows you to quickly collect a series of observations in an ad-hoc, opportunistic fashion. You can link any observation to questions and results after collecting them.

You should already see a number of observations/attachments from your previous work on this inspection in the IA-Desktop workshop. If you don't, check your sync status and press the refresh button. Let's test the basic features of the list.

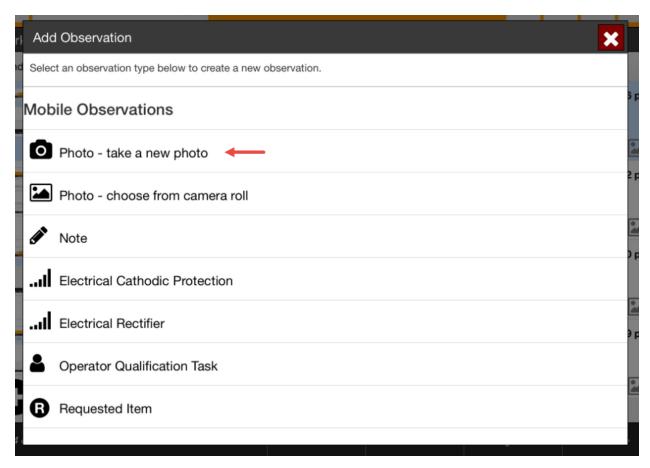


- 1. Use the search button to search the observation list for a specific item (type a keyword).
- 2. You can also remove multiple observations via the 'Item Select' button. Remove one observation this way.
- 3. Under List Settings , you can filter the list to certain observation types, as well as set some optional settings for list behavior. We will circle back to these settings later.
- 4. Finally, you can set the default asset via the selector provided. This is the asset each observation will automatically be linked to. It can be changed later, but having it set to the asset you are currently on is helpful. Note that each time you open IA-Mobile you will be shown a summary screen listing the currently selected default asset and activity. This summary will display a warning if the selected default asset is not included in the currently selected activity. You can select to dismiss this summary for the day so that it does not appear each time you open the app.

Step 5: Collecting Observations Part 1

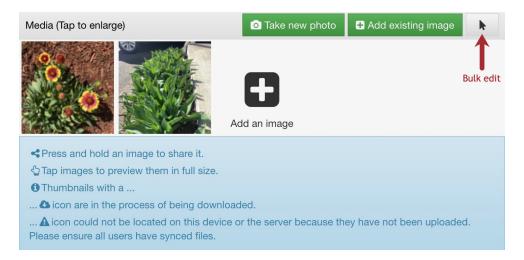
New observations can be collected by clicking at the bottom-left of the screen. Let's collect a photo observation.

- 1. Click the add observation button in the lower left.
- 2. Choose "Photo take a new photo" (you also have the option of attaching a photo you took previously with your device).



- 3. Take a photo, and tap "Use Photo" in the bottom right of the screen.
- 4. Add a title and a note to the photo observation.
- 5. You can add another photo via the 'add new image' button. This will create a multi-photo observation. You can use this approach to document situations from several angles.
- 6. Tapping an image will allow you to add a caption to it.
- 7. Each photo can be "shared" by pressing and holding the image. This feature will help you send photos to other applications, copy them to the iPad clipboard for pasting etc. Note that the functions of the share button will depend on the management policy on the device.

8. You can use the bulk edit button to quickly prune several attached images (or files) from the observation. Add one or two more photos, then remove a few of them via the bulk-edit feature.



- 9. When you are done, you can return to the observation list in two ways
 - a) Click the < Observations button
 - b) Click the 'Observations' link in the navigation bar



Either way, your photo observation will be automatically saved when you return to the observations list.

10. To return to your observations (to modify the note, or add another photo) just click the item in the list. Do that now for the photo you just created, change the note and add one more photo.

Tip: Within the IA-Mobile "Inspection Utilities" menu, there is an "Autosave to Camera Roll" button you can turn this functionality on if you'd like to save images taken via the camera within IA-Mobile to your device's camera roll/photo library. When using this feature, ensure that IA-Mobile has "read and write access" to your photos library via your iPad settings. If you'd like location information attached to the images that will be saved to the camera roll, ensure that IA-Mobile also has permission to access your device's location. You can quickly navigate to the app's settings via the blue "App Settings" button on the login screen.

Note that your iPad's camera may have location permissions that are set independently of IA-Mobile, but if you're using the camera via IA-Mobile, IA-Mobile's location permission settings (and not the camera's settings) will likely apply.

Step 6: IA-Mobile interop with IA-Desktop

IA-Mobile syncs its data to the IA-server for re-distribution to all team members just like IA-Desktop does. Let's see how our observation looks in IA-Desktop.

- 1. If you have not already, start IA-Desktop (EDU version, not production), log in and open your inspection. Wait a few moments for the data we just collected in IA-Mobile to sync.
- 2. Go to the 'Attachments' sub-tab under the 'Overview' tab
- 3. You should see your recent photo attachment in the list. Click the counter box to download the pictures. IA-Desktop downloads the photos on demand. Once you click on them, you'll have them locally and will see thumbnails (small images) of the actual photos.



- 4. Using IA-Desktop, open your photo observation (called a <u>file attachment</u> on desktop) by clicking the 'edit' link and add some additional text to the note.
- 5. Return to IA Mobile to see those changes come in.
- 6. Next, go to IA-Desktop and create a new File Attachment with a PDF document. This would be a typical file-type for an operator's procedure manual for example.
- 7. Then, go to IA-Mobile find, and open that PDF. This is how documents provided during office visits can be accessed via IA-Mobile in the field.

Step 7: Collecting Observations Part 2

IA-Mobile supports several different observation types including Notes, Electrical Readings, Task Observations, Requested Items, Documents Reviewed, Construction Daily forms, and various field observations related to new construction. Let's explore a few of these.

- 1. Create at least five more observations (of different types) in IA-Mobile and then confirm they arrive in IA-Desktop.
- 2. In IA-Desktop, experiment with the different attachment tile sizes to see how the data from different observation types is displayed in each mode.

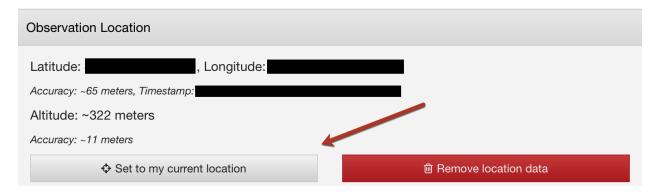


3. If you have not already done so, add a Construction Daily Form via IA-Mobile and then find it in IA-Desktop. Via IA-Mobile, you can also add several different types of Construction Observations to the Construction Daily Form (under the Activities Observed/Performed section) and view these in IA-Desktop. Hint: Data Forms in IA desktop are stored under the "Forms" tab.

Step 8: Geotagging Observations

If you allow it (as we did by setting IA-Mobile's location setting to "while using"), IA will stamp each observation with the device's location. You can also update an observation's location to your current location, or use the location information from an image you upload. You can also view a map of the area each observation was collected in.

1. Open an observation and scroll down to the Observation Location section and click the "set to my current location" button. This will set the observation location to the current location.



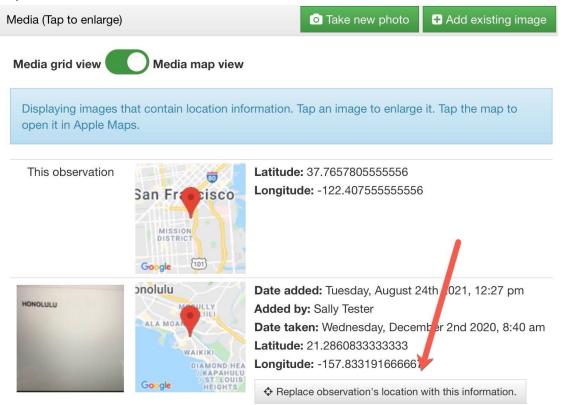
- 2. Scroll down to the Map section. Try the Google Maps and Apple Maps integration buttons. Note: You will not see the Google Maps option if Google Maps is not installed on your device. In that case, use Apple Maps instead.
- 3. The share button allows you to share the map image outside IA. Note the "Share" button may not offer the same options to all users depending on your device policy.

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4. If you have a photo on your iPad that has location information, add it to this observation. Then toggle the switch to view the "media map view":



5. Now you will also be able to see the location information for the image you added (note that not all images will necessarily have location information. Review your iPad location settings and iPad camera settings if needed). To replace the observation's location with that from the image, tap "replace observation's location with this information":

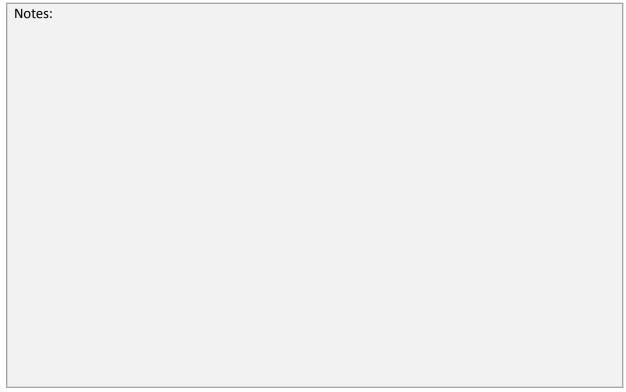


6. Scroll down to the observation map and see that it has updated to the image's location.

PAUSE here and assist others in your group to get to this point.

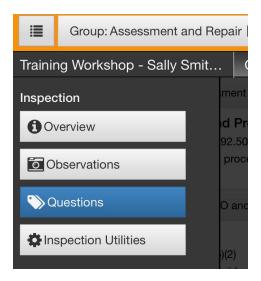
Presentation: The Question Browse Interface





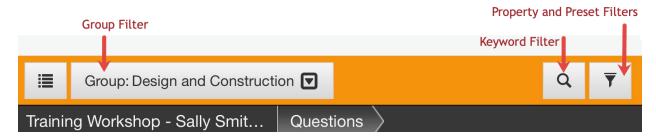
We will now switch from observation collection to question browse and result collection.

Open the side-menu and select the "Questions" option. IA-Mobile will display a list of questions.

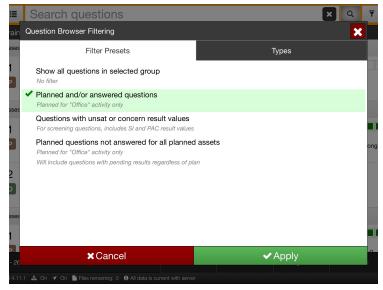


Step 9: Using Question List Filters

IA-Mobile will show you a list of questions (planned and unplanned). This list can be filtered several ways.

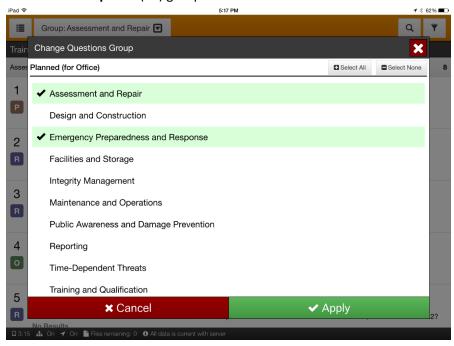


1. The filter button will provide several useful filter presets. Try each. You may wish to increase the number of groups displayed in some cases in order to see questions.

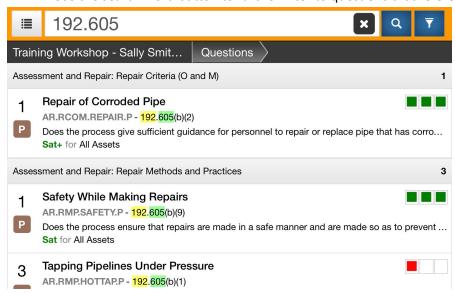


2. Select the "Planned or Answered questions" filter and select all groups with the groups filter. Depending on your inspection's plan and the model of device you are using, you may find this view too slow. If performance is not adequate, reduce the number of groups displayed.

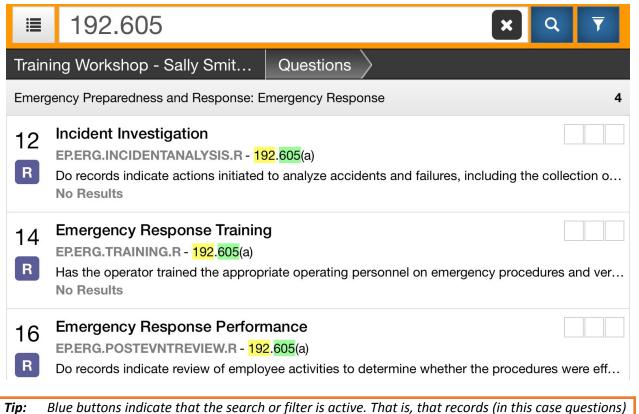
 Use the groups filter to select the Assessment And Repair (AR) and Emergency Preparedness and Response (EP) groups



4. Use the search word button to further filter to questions that reference 192.605.



5. Finally, use the filter button's "types" tab to reduce the list to only Record questions



are being hidden due to filtering. To see all the questions again, just clear the filters.

6. Set all filters back to default

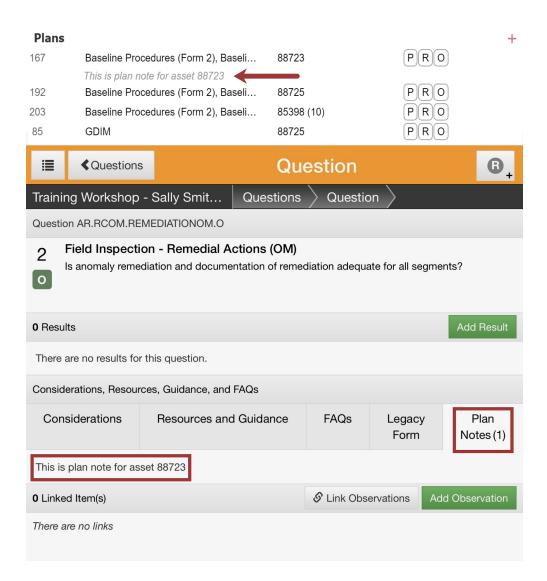
Step 10: Viewing questions, adding inspection note

You can tap any of the questions to view the question content, guidance, references and inspector's note and add results.

1. Tap a question, view the considerations and resources/guidance

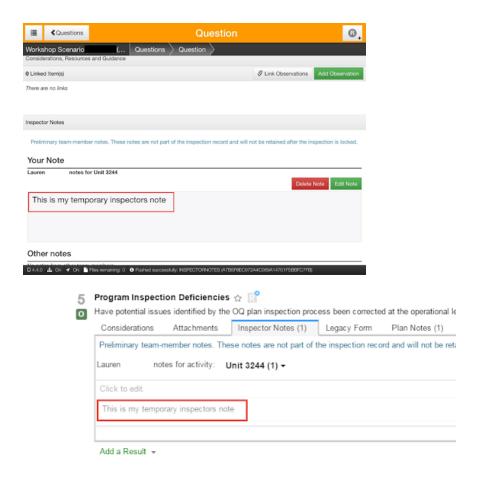
Note: these next steps are higher level than previous steps and thus may take you some exploration to complete, don't get frustrated, take your time and ask questions if you get stuck.

2. If you have not already done so, add a plan note to a plan item (you'll have to use IA-Desktop's plan tab to do this). Locate the plan note on a question in IA-Desktop, then find the same question in IA-Mobile. See the plan note appear in each case.



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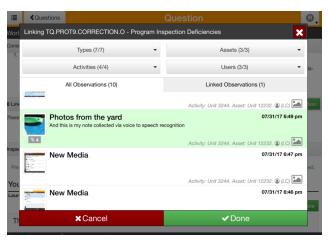
3. Near the bottom of the question screen, you can add a temporary inspector note to this question. Add a note, and then find that note in IA-Desktop.



Step 11: Linking observations to questions. Before starting this step, it will be helpful to recall the difference between a <u>question</u> and a <u>result</u>. If an observation is related to a specific <u>question</u>, you can link it to a question via the question details page.

1. Click the "Link Observations" button and select an observation to link. You will see the observation listed under the "linked observations" header in your question detail page, just above the inspector's notes section.







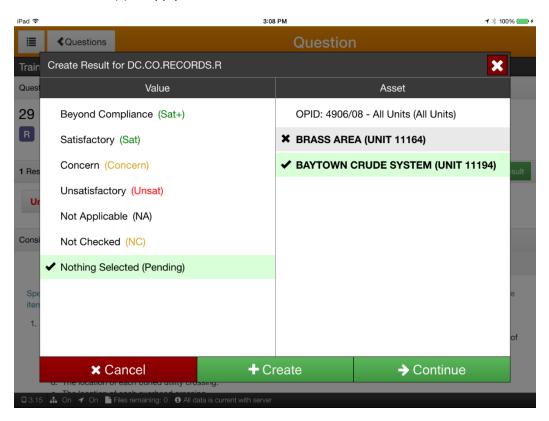
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Linking observations to questions will place those observations in higher context whenever a user views that question in IA-Mobile and Desktop. Later, when <u>results</u> are created for that question, it will be easy to link these observations to the results themselves. It is not necessary to first link an observation to a question before linking it to a result, but it can be helpful to have done so.

Step 12: Collecting Results

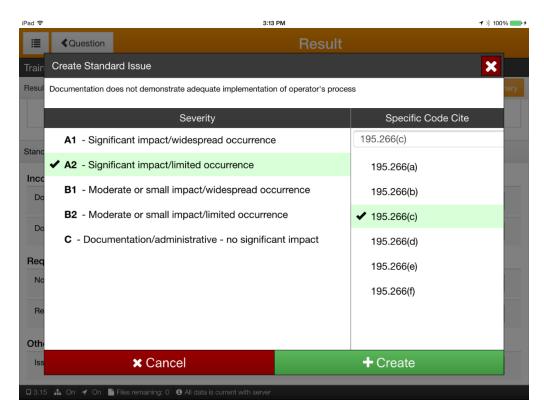
Inspection results can be collected directly via IA-Mobile.

- 1. Open a planned question, click the Add Result button to create a new result.
- 2. The first step in creating a result for a question is to select a preliminary value (sat/unsat) and the asset(s) to apply it to. Do this now with the value "unsat".

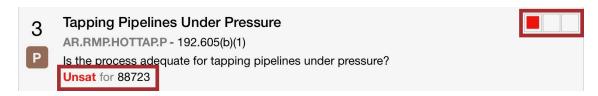


- 3. Then you can opt to simply create a basic result with the selected value and asset(s), or you can click continue to complete the result in more detail. Press Continue.
- 4. Scroll through the result screen and enter notes for the result.

5. Then add some issue summary text and at least one standard issue.



6. Return to the question list to see your question's progress box filled in with red, indicating an unsat has been recorded for this question.



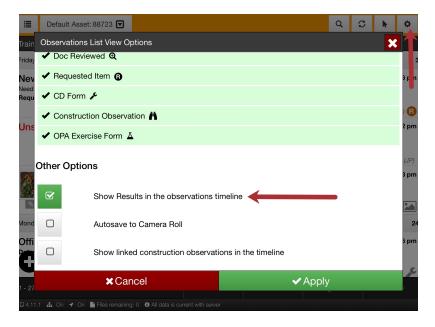
7. You can also side-swipe a question in the question list to add a result (this saves a click). Swipe a question from right-to-left and tap the green "add result" button. Finish adding the result.



Add a requested item (RQI) in the same way.

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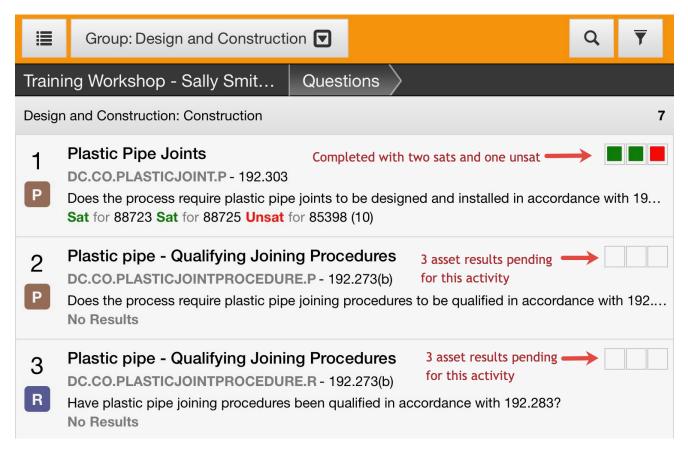
8. Return to the Observation list (via the side-drawer menu). If you wish to see both observations and results blended together in the observation list, you can select this option in the observation settings.



9. Add 4 more results to different questions using IA-Mobile. Use different result values (sat/unsat etc) each time. Find your results in IA-Desktop.

Step 13: Monitoring progress

IA does not at this time have the activity-wide progress bars that IA-Desktop has. It does, however, have a related feature that IA-Desktop does not have. The question browser has a completion indicator for each question. Each box represents an asset/question pair in the current activity's plan, with this tool you can tell at a glance if the question has missing results, and also what sort of results (if any) are collected for the question.



Here the Plastic Pipe Joints question has three assets in the plan, two are already answered with sat and the other is unsat.

- 1. Note that the progress display is dependent on your current activity. Change your activity (via the side-drawer menu) and observe how the progress displays change.
- 2. Find a question with empty boxes, and record a result for the planned asset(s). Notice how the box shading changes.

Step 14: Linking Observations to Results

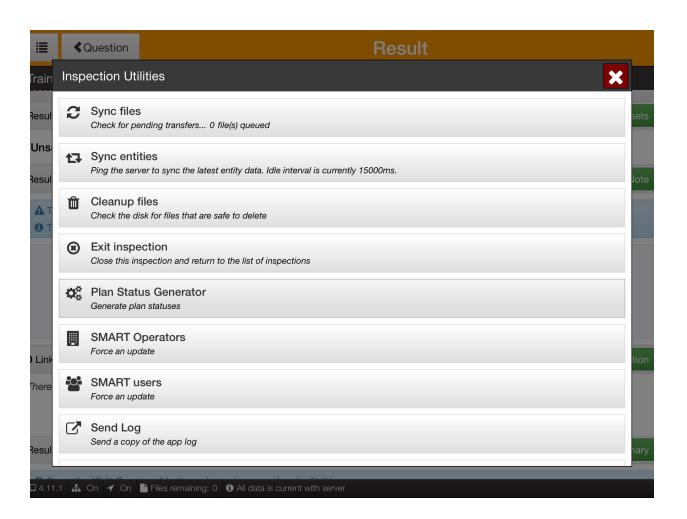
Observations can be linked directly to results (just as in IA-Desktop).

- 1. Select a <u>result</u>, scroll to the <u>Link Observations</u> section and link at least one observation to the result.
- 2. Check the same result in IA Desktop and see the linked result there

Files attached to unsat results are considered 'evidence' regardless of where the link was made.

Step 15: Inspection Utilities

In the side-drawer menu, there is an "Inspection Utilities" option. Tapping will provide a list of utilities that can be useful if you run into difficulty.





Presentation: The Inspection Utilities
lotes:

Congratulations! You've completed the objectives of this workshop. Remember that you can reach out to IA-support@dot.gov if needed.

Step 16: Help us improve this workshop

Please jot down responses to the following questions and hand to your instructor.

1. What topic areas do you feel you are strongest on now?

2. What is the most important/useful thing you learned today?

3. What areas did we miss or should have spent more time on?

4. Generally, what should we do differently next time?